



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,901	08/11/2004	Rong Huang		4900

7590 04/18/2006

RONG HUANG
8601 Middleton Circle
Harrisburg, NC 28075

EXAMINER

SAYADIAN, HRAYR A

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,901

Applicant(s)

HUANG, RONG

Examiner

Hrayr A. Sayadian

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO 1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8-11-2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Please Secure Services of Registered Attorney/Agent

1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450.

Defective Oath/Declaration

The Oath/Declaration was not properly executed. The entry representing Applicant's electronic signature must be in-between "/.../." See, 37 C.F.R. §1.4(d)(2).

A corrected supplemental oath declaration is required.

Claim Rejections - 35 U.S.C. § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Regarding claim 3, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

4. Regarding claims 3 and 4, the phrase "100 GHz, 50 GHz, etc." render the claim indefinite because it is unclear what "etc." covers.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by PG PUB US 2003/0112500 of patent application submitted by Miki et al. [hereinafter "Miki"].

With respect to Claim 1:

Miki discloses wavelength locked thermally tunable laser comprising: A semiconductor laser (element 31 of FIGs. 3A/3B), whose output wavelength [is] adjusted thermally and continuously; A wavelength locker, comprising: (a) a solid etalon (34), whose free space range or its physical thickness relates to the temperature characteristics of said semiconductor laser; (b) a first photo detector (33b) for detecting a collimated light (lens 32/32a) extracted from said semiconductor laser and transmitting through said solid etalon; (c) a second photo detector (33a) for detecting the power output of said semiconductor laser; Said semiconductor laser and wavelength locker packaged on one single platform (22b); The temperature of said platform, semiconductor laser and solid etalon adjusted (see, for example, the last sentence of [0055]) by a thermal electrical cooler (21); A temperature detecting element (39) disposed near said solid etalon for detecting the ambient temperature of said etalon (see, for example, [0047]-[0054], describing detecting the etalon's ambient temperature and its control); A means (lead pins 11c shown in FIG. 2, as described in [0045]) of locking the wavelength of said semiconductor laser to a specific wavelength by an outside electronic controller.

With respect to claim 2:

Art Unit: 2828

The recited features describe the inherent characteristics of Fabry-Perot etalon (34). All Fabry-Perot etalons have at least two parallel surfaces that are partially reflecting/transmitting. And all solid etalons have thicknesses.

With respect to claims 3 and 4:

The recitation of equations describing the FSR of an etalon and its thickness as temperature varies do not further narrow the scope of claims 3 and 4 because the FSR and thickness of the etalon naturally depends in the manner recited.

With respect to claim 5:

The processor the lead pins 11c (in FIG. 2 of Miki) carry the info to is the means recited in the claim.

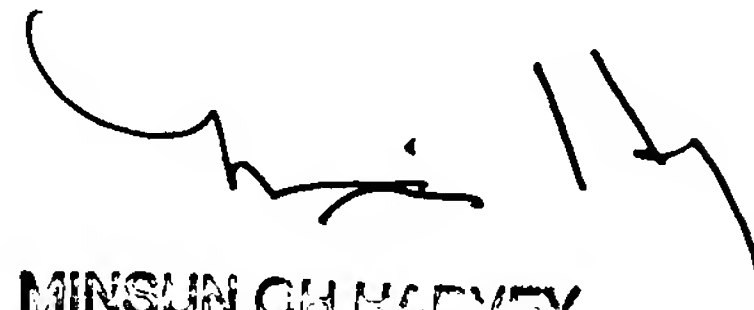
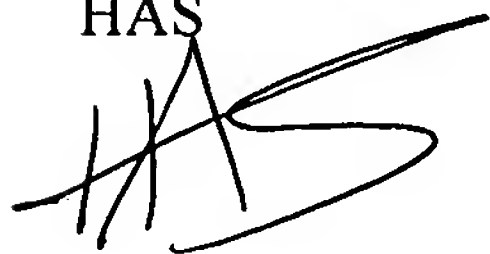
CLOSURE

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hrayr A. Sayadian whose telephone number is (571) 272-7779. The examiner can normally be reached Monday through Friday, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun O. Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HAS



MINSUN O. HARVEY
PRIMARY EXAMINER